



AU9540711

---

**(12) PATENT ABSTRACT (11) Document No. AU-A-40711/95**  
**(19) AUSTRALIAN PATENT OFFICE**

---

(54) Title  
**INSPIRATORY AIRWAY PRESSURE SYSTEM**

(55) International Patent Classification(s)  
**A61M 016/00**

(21) Application No. : **40711/95** (22) Application Date : **28.12.95**

(30) Priority Data

(31) Number **632327** (32) Date **21.12.90** (33) Country **US UNITED STATES OF AMERICA**

(43) Publication Date : **18.04.96**

(62) Related to Division(s) : **82154/91**

(71) Applicant(s)  
**PURITAN-BENNETT CORPORATION**

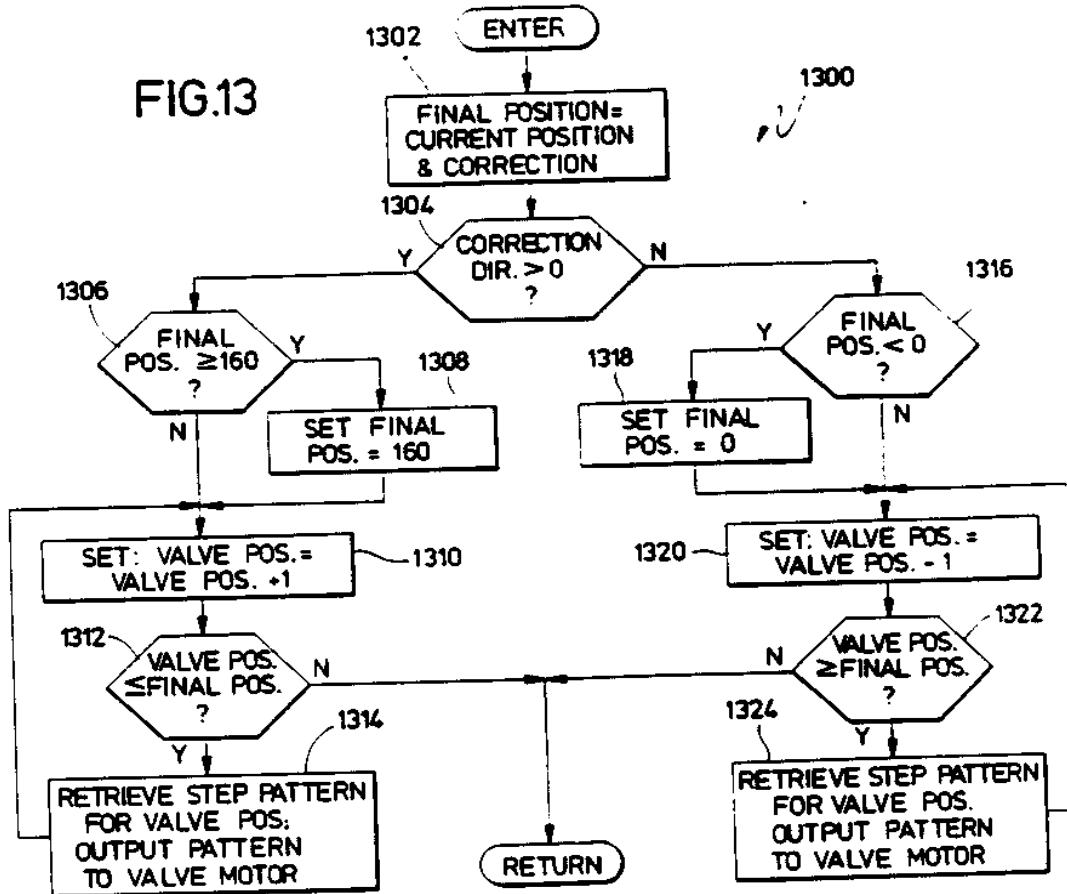
(72) Inventor(s)  
**ROGER A. GRUENKE; RUSSELL L. TRIMBLE; CHRISTOPHER D. LASNIER; STEVEN W. LOETHEN; JIRI G. ORLT; JAMES A. SNOOK; MARILYN S. WYBLE**

(74) Attorney or Agent  
**DAVIES COLLISON CAVE , 1 Little Collins Street, MELBOURNE VIC 3000**

(57)

An apparatus and method for treating mixed and obstructive sleep apnea by increasing nasal air pressure delivered to the patient just prior to inhalation and by subsequently decreasing the pressure to ease exhalation effort by sensing, tracking, storing, and comparing breathing parameters such as flow, pressure, and sounds against pre-determined values of these parameters and controlling delivered gas pressures thereby. Gas is delivered to the patient by means of a nasal air pillow. An alternate embodiment stimulates breathing by means of a pair of electrodes which electrically stimulate the upper airway muscles. An apparatus for the detection and compensation of leaks and/or pressure drops is also disclosed.

FIG.13



•••

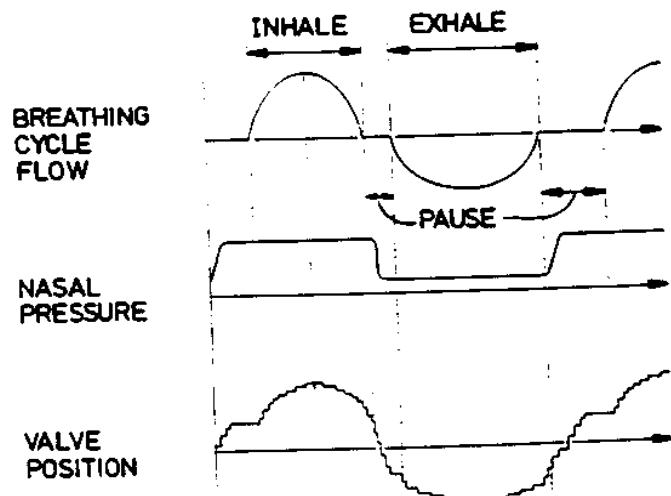


FIG.6

40711/95

6 of 22

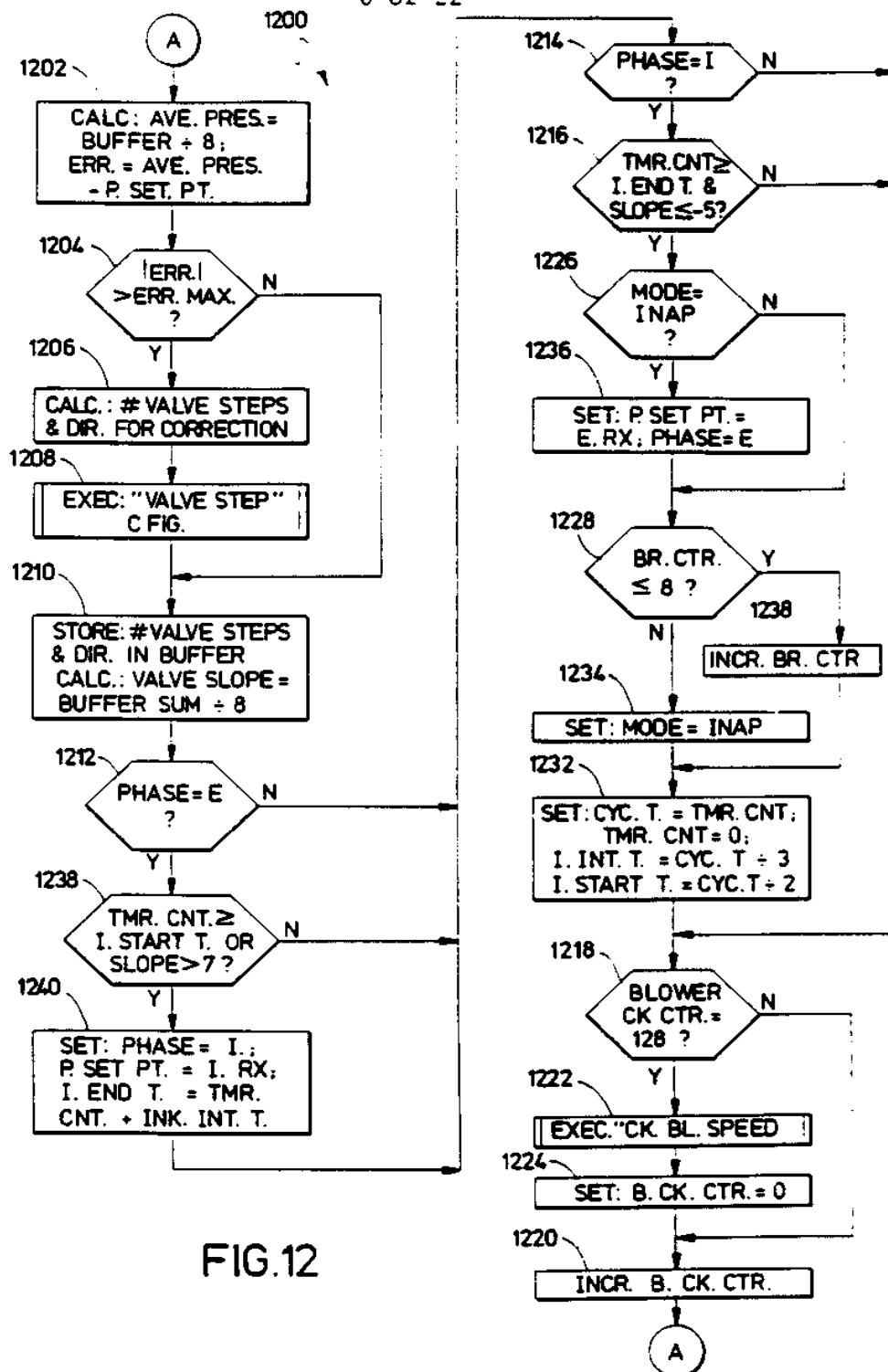


FIG.12